# INDIAN INSTITUTE OF SPICES RESEARCH Post Bag No: 1701, Marikunnu Post, Kozhikode (Calicut) - 673 012, Kerala, India

# IISR, KOZHIKODE - A PARTNER IN HIGHER EDUCATION IN THE COUNTRY

Volume 1

Inside HRD-Agenda of Action Ethiopian Delegation Research Highlights Germplasm collection Participation in Symposia/ Seminars 2-18 217 Guest Lectures AICRP (Spices) Workshop 10 Awards/Honours 11 Transfer of Technology V.L. Chopra, Member Planning Commission 14 AN 15 New Projects sanctioned ...... Personnel ..... NO.Y

The Indian Institute of Spices Research, (IISR) started as a Regional Station of the Central Plantation Crops Research Institute, Kasaragod in 1975, was elevated to the Indian Institute of Spices Research in 1995 through National Research Centre for Spices, carrying with it a kitty of recognitions by different Universities in the country.

January - June 2004

The latest in the series to recognize the Institute for Ph.D studies in the disciplines of Genetics, Plant Breeding, Plant Physiology, Agronomy, Horticulture, Biotechnology, Biochemistry, Organic Chemistry, Soil Science & Soil Chemistry, Plant Pathology, Nematology, Entomology, Agricultural Economics and Agricultural Extension is Mangalore University, Mangalore.

Nagarjuna University, Guntur also recently recognized nine scientists of the Institute including Director as research supervisor in

Biotechnology for Ph.D guidance. Dr. V. A Parthasarathy, Director; Dr. M. Anandaraj and Dr. (Ms.) B. Chempakam, both principal scientists; Dr. K. Nirmal Babu, Dr. B Sasikumar, Dr. Johnson K George, Dr. A.I Bhat and Dr. Ramakrishnan Nair, all senior scientists besides Dr. A. Kumar, scientist (senior scale) are the scientists now recognized by the University.

The Institute is already recognized by Calicut University, Calicut and Bharathiar University, Coimbatore as centre for Ph.D studies.



# HUMAN RESOURCE DEVELOPMENT- AGENDA OF ACTION

Human resource development at the Institute is not a mere mission statement but one fully backed with a strong agenda of action. M.Sc. project works, summer trainings and Ph.D programmes are regular part of the HRD activity at this Institute. A total of 20 students drawn from different Universities have completed their M.Sc. project during January-March 2004 at the Institute.

### Summer Training

A summer training in Biotechnology and Biochemistry exclusively for M. Sc. students was conducted during May 5 to June 4, 2004, at IISR, Kozhikode. A total of 19 students from various colleges representing six universities participated.

## ETHIOPIAN DELEGATION AT IISR, KOZHIKODE

A senior level delegation from Ethiopia, headed by the Director General of the Ethiopian Agricultural Research Organization (EARO) visited IISR, Kozhikode, during 26-27 May 2004. The delegation consisted of Dr. Tsedeke Abate, Director General, EARO; Dr. Getinet Gebeyehu, Managér, Agriculture Inputs Authority; Dr. Getahum Alena, Manager, Ethiopian Seed Enterprise and Mr. Ibrahim Mohamed, Head of Agricultural Enterprise.



Ethiopian delegates with Director, IISR & Project Coordinator (Spices)

Director briefed the delegation about various research activities of the Institute. The Director General gave talk on 'Ethiopian Agriculture' in the Institute study circle. They were taken to different laboratories in the Institute. The delegation also visited Krishi Vigyan Kendra, Peruvannamuzhi; farmer's field and IISR Experimental farm, Peruvannamuzhi, Kozhikode.

<b>RESEARCH HIGHLIGHTS</b>
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Morphological and molecular characterization of new black pepper lines

Morphological and molecular characterization (RAPD) of seven promising black pepper lines viz. HP-105, HP-728, HP-780, HP-813, HP-1411, Coll. 1041 and OPKm revealed the usefulness of RAPD in characterizing varieties/ lines as the three lines OPKm, HP - 1411 and HP - 105, which were distinct morphologically fram the rest, also had maximum number of unique RAPD bands.

## Isolation of DNA from cardamom capsules

A modified CTAB (3%) method was perfected for isolation of amplifiable-genomic DNA from dried capsules of cardamom.

## RAPD marker linked to sex expression in nutmeg

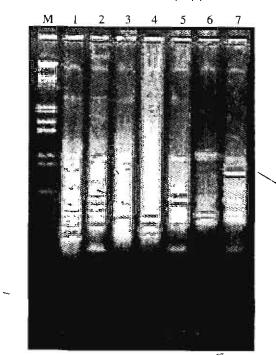
Molecular profiling of sex types in nutmeg using primer OPA – 17 revealed the association of a marker (0.7 kb) with female and bisexual types.

# ISSR markers useful in discriminating spices germplasm

The inter simple sequence repeats (ISSR) based primers are found useful in amplifying inter-micro satellite regions of small cardamom, large cardamom, different species of vanilla, Piper and Garcinia. A single ISSR primer yielded reproducible and consistant DNA bands to discriminate selected species of Piper, vanilla

## SPICES NEWS

and Garcinia. ISSR markers were also found useful in identifying selected cultivars and released varieties of black pepper.



ISSR profile generated with ISSR 02 primer in selected Piper species. M-DNA/Hind III-ECORI double digest. 1. P.chaba 2. P.nigrum 3. P.langum 4. P.colobrinum 5. P.trachystachyum 6. P.trichostachyon 7. P.bababudani.

## Scanning ginger germplasm for quality

Three ginger accessions are found to contain above 6% oleoresin. Incidentally these accessions are also rich in fibre. The accessions are-:

Acc. No.	Oleoresin(%)	Fibre(%)
Acc. 65	7.0	4.0
Acc. 137	6.1	6.0
Acc. 633	8.6	5.1

# High yielding nutmeg

Nutmeg Acc. A9/20 and Acc. A9/53 are identified as new promising selections. These accessions yielded 1180 and 1315 fruits tree<sup>-1</sup> year<sup>-1</sup>, respectively.

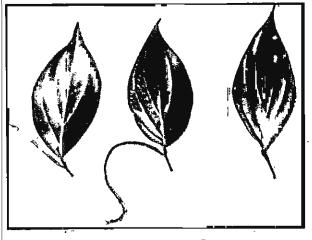
# Role Reversal

## Sex change in Piper thomsoni

Piper species have male, female or bisexual forms. Cultivated black pepper, Piper nigrum, is bisexual whereas wild P. nigrum is unisexual. Sex reversal or sex change in Piper species is not reported.

A species of Piper, namely Piper thomsoni, collected separately as male and female plants from 'Tottopara' forests from the Jalpaigiri district of West Bengal, in the foot hills of Bhutan during 2003 and conserved in the genebank, IISR, Kozhikode has thrown out surprise through sex change.

The male plants of Piper thomsoni are characterized by erect, filiform spikes without berries, which fall off after a period, while female plants have persistent subglobose spikes. The male plants conserved under protected conditions at the IISR genebank have now thrown out persistent spikes of sub pendant nature with 5-30 berries per spike. However, the female plants conserved under same conditions maintained their female identity.



Piper thomsoni &, sex reversed and P spikes

# Coat protein gene of *Cucumber mosaic virus* infecting black pepper sequenced

The coat protein gene of a Cucumber mosaic virus associated with stunted disease affecting black pepper was cloned and sequenced. The coat protein gene comprised of 657 nucleotides encoding a protein of 218 amino acids. Sequence analyses showed that the gene was most closely related to Cucumber mosaic virus infecting Egyptian henbane plant in India, the members of subgroup I of Cucumber mosaic virus. The amino acid sequence identity with members of subgroup I was 92 to 99% while with members of subgroup Il was from 77 to 79%. On the basis of sequence identity, it is concluded that Cucumber mosaic virus infecting black pepper in India should be regarded as a strain of Cucumber mosaic virus belonging to the subgroup I.

# GERMPLASM COLLECTION

An exotic Piper species having resemblance with P. colubrinum but with erect spikes was callected from Anand, Gujarat and added to the germplasm.

# PARTICIPATION IN SYMPOSIA/ SEMINARS/ TRAINING/MEETING

## Anandaraj, M

XVII Workshop on AICRP (Spices), 3-5 Feb. 2004, IISR, Kozhikode.

Group meeting on seed spices, 28 May, IISR, Kozhikode and 29 - 30 June, 2004 NRC on Seed Spices, Ajmer.

# Anke Gowda, S.J

Anthurium disease management meeting, 4 June 2004, Madikeri, Kodagu.

JANUARY-JUNE 2004

## Devasahayam, S

National group meeting of scientists of AICRP on Cashew, 5-6 June 2004, National Research Centre for Cashew, Puttur.

XVII Workshop on AICRP (Spices), 3 - 5 Feb. 2004, IISR, Kozhikode.

## Hamza, S

16<sup>th</sup> Kerala Science Congress, 29-31 January 2004, CWRDM, Kozhikode.

# Iswara Bhat, A

XVII Workshop on AICRP (Spices), 3-5 Feb. 2004, IISR, Kozhikode.

## Jacob, T.K

Action plan meeting of KVK's of Zone VIII, 14-15 April 2004, TNAU, Coimbatore.

Refresher course on Biological Control of Crop Pests, 10-15- November 2003, PDBC, Bangalore.

Impact Analysis of Agriculture R & D, 4-10 December 2003, NAARM, Hyderabad.

# John Zachariah, T

Seminar on Vanilla in India – Aspects and Prospects, 29-30 April 2004, Sirsi.

XVII Workshop on AICRP (Spices), 3-5 Feb. 2004, IISR, Kozhikode.

STEC Meeting to finalize project proposal on

white pepper production, 26 March 2004, Sastra Bhavan, Thiruvananthapuram.

#### Kandiannan, K

Workshop on evolving strategies for mobilizing rainwoter harvesting in Kerala, 5 May 2004, Kozhikode.

Interactive Meeting with key stake holders of organic farming, 21 April 2004, MS Swaminathan Research Foundation, Kalpetta, Wynad.

## Krishnamoorthy, B

34<sup>th</sup> town official language implementation committee meeting, 3 June 2004, Kozhikode.

XVII Workshop on AICRP (Spices), 3<sup>-</sup> 5 Feb. 2004, IISR, Kozhikode.

## Manoj, P

Hi-tech floriculture, 3-10 March 2004, IIHR, Bangalore.

# Mathew, P.A

Seminar on Vanilla in India - Aspects and Prospects. 29-30 April 2004, Sirsi.

XVII Workshop on AICRP (Spices), 3-5 Feb. 2004, IISR, Kozhikode.

# Nirmal Babu, K

Molecular mapping in crop plants, 27 February 2004, NBPGR, New Delhi.

Availability and utilization of gene constructs related to development of transgenics in field and horticulture crops, 28<sup>th</sup> Feb. 2004, NBPGR, New Delhi.

The 4<sup>th</sup> meeting of the Project Advisory Committee of the network DBT project, 'Improvement of selected spices through Biotechnology tools', 16 January 2004, IISR, Kozhikode.

The 3<sup>rd</sup> meeting of the Programme Monitoring Committee of the DBT network project 'Onfarm evaluation of tissue cultured plants of black pepper', 16 January 2004, IISR, Kozhikode.

# Parthasarathy, V.A

Meeting on Gene pyramiding, 27 January 2004, DMR, IARI, New Delhi.

XVII Workshop on AICRP (Spices), 3-5 February 2004, IISR, Kozhikode.

NATP meeting, 13 February 2004, CTCRI, Thiruvananthapuram.

Conference on Organic Agriculture in North East India, 16 February 2004, ICAR Research Complex, Barapani, Shillong.

Meeting on Seed Production in Agricultural crops and fisheries, 23-25 February 2004, NBPGR, New Delhi.

Director's Meeting - Hort. Division, 11 March 2004, ICAR, New Delhi.

ICAR Governing Body, 10 March 2004 and 5 May 2004, ICAR, New Delhi.

Group meeting of AICRP on Tuber Crops, 24 May 2004, CTCRI, Thiruvananthapuram.

JANUARY-JUNE 2004

Group meeting on seed spices, 28 May 2004, IISR, Kozhikode.

SRC meeting, 28 June 2004, NRC (Cashew), Puttur.

## Prakash, K.M

Advances in videography and photography, 26-8-2003 to 5-9-2003, NAARM, Hyderabad.

## Ramana, K.V

XVII Workshop on AICRP (Spices), 3–5 Feb. 2004, IISR, Kozhikode.

Meeting of spices and condiments sectional committee FAD-9, 17 March 2004, Spices Board, Kochi.

Group meeting on seed spices, 28 March 2004, IISR, Kozhikode and 29-30 June 2004, NRC on Seed Spices, Ajmer.

National Workshop on Organic Farming, 22-23 May 2004, PDCSR, Modipuram, Meerut. Santhosh J. Eapen

Brainstorming session on Bioinformatics, 5 January 2004, Anna University, Chennai.

BTIS Net Annual Coordinators meeting, 6-7 January 2004, Anna University, Chennai.

Training course on Biotechnology and IPR, 17-22 March 2004, National Law School, Bangalore.

Workshop on Networking of Indian Biodiversity Databases, 23-24 March 2004, Centre for Ecological Sciences, Indian Institute of Science, Bangalore.

# Sasikumar, B

National Seminar on Biotechnology - A tool for Sustainable Agriculture Production, 5-6 January 2004, BA College of Agriculture, Anand.

Gene pyramiding Meet, 27 January 2004, DMR, IARI, New Delhi.

XVII Workshop on AICRP (Spices), 3-5 February 2004, IISR, Kozhikode.

"Farmer's Seminar, Calicut Flower Show, 13 February 2004, Kozhikode.

Programme Committee Meeting, AIR, Kozhikode, 25 May 2004 KVK Ambalavayal, Wynad.

Group meeting on Seed Spices, 28 May 2004, IISR, Kozhikode.

## Shiva, K.N

XVII Workshop on AICRP(Spices), 3–5 Feb. 2004, IISR, Kozhikode.

Group meeting on Seed Spices, 28 May. 2004 and 29 - ~30 June, NRC Seed Spices Ajmer.

# Srinivasan, V

National Workshop on Organic Farming, 22-23 May 2004, PDCSR, Modipuram, Meerut.

# Susheela Bhai, R

Farmer's meet, 21 April 2004, MSSRF, Kalpetta, Wynad.

Seminar on Vanilla in India - Aspects and Prospects, 29-30 April 2004, Sirsi.

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State level quality control meeting for monitoring production and distribution of quality rooted cuttings of spices, 27-29 May 2004, Directorate of Agriculture, Thiruvananthapuram.

## Utpala Parthasarathy

Global spatial data infrastructure - 7<sup>th</sup> conference, 30 Jan  $-6^{th}$  Feb. 2004, Bangalore.

# GUEST LECTURES DELIVERED/PAPERS PRESENTED

Anke Gowda, S. J

'Black pepper and vanilla cultivation practices'. Village level horticulture training at Kakabe, 9 March 2004, Nalkanadu Farmers Club, Napokkalu, Karnataka.-

'Agronomical practices in black pepper cultivation'. Black pepper Seminar, 16 March 2004, Madikeri, Karnataka.

'Black pepper and cardamom cultivation practices'. Horticulture training programme, 5 May 2004, Nalkanadu farmer club, Napokkalu, Karnataka.

'Ginger, black pepper and cardamom cultivation practices'. Hangal village gramma panchayat, 11 June 2004 Somavarpet, Kodagu, Karnataka.

## Ishwara Bhat, A

'Identification of viral diseases and selection of virus free plants for multiplication'. 14 January 2004, IISR, Kozhikode.

# Johny, A.K., Shiva, K.N and Ramana, K.V

'Technology for advancement for ginger

production' - State level seminar on spice production, processing and marketing in West Bengal, 26-27 February 2004, RRS, Dinajpur, UBKVV, Pundibari, West Bengal.

'Technology development for accelerated production of turmeric'. State level seminar on spice production, processing and marketing in West Bengal, 26-27 February 2004, RRS, Dinajpur, UBKVV, Pundibari, West Bengal.

# John Zachariah, T

'Biochemistry of Spices'. Meeting of Chemistry Association, 8 January 2004, Providence Cóllege, Kozhikode.

'Need for scientific awareness in society'. National Science Day Celebration, 28 February 2004, VHSS for girls, Nadakkavu, Kożhikode.

'Value added products from spices'. Centre for Management Development, 31 March 2004, Kozhikode.

'Processing and value addition of spices', 12 April 2004, CMD, Thiruvananthapuram.

## Johnson K. George

'Gene finding and tagging strategies', Seminar on Bioinformatics for Biosciences, 22-24, March 2004, GRD College of Science, Coimbatore.

## Parthasarathy, V.A, Saji, K.V and Kandiannan, K

'Tropical spices for better economic prospects in coastal ecosystem'. National Seminar on Advances in Coastal Agriculture and Value

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Additian from National perspectives, 21-24 January-2004, CPCRI, Kasargod.

## Sasikumar, B

'Varieties and varietal improvement of black pepper'. 20 April 2004, IISR, Kozhikode.

'IPR and patenting'. 4 May 2004, IISR, Kazhikade.

'Agrobacterium mediated transformation of Plants'. 12 March 2004, IISR, Kozhikode.

# Parthasarathy V.A, Utpala Parthasarathy and Kumaran, P.M

'Application of satellite imagery technique to estimate coconut cultivation area.' Global spatial data Infrastructure, 7<sup>th</sup> conference, 30<sup>th</sup> January - 6<sup>th</sup> February 2004, Bangalore.

# PUBLICATIONS

# **Research articles**

Anu, A, Babu, K.N and Peter, K.V. 2004. Variations among somaclones and its seedling progeny in Capsicum annum L., Plant Cell, Tiss. and Org. Cult., 76:261-267.

-Anu, A, Babu, K.N and Peter, K.V. 2002. Evaluation of Paprika genotypes in Kerala. Ind. J. Plant Genet. Res. 15: 93-99.

Delphine Sicard, Eirk Legg, Sarah Brown, Nirmal Babu, K., Oswaldo Ochoa, Padma Sundarshana and Ricahrd. W. Michelmore. 2003 . A genetic map of the lettuce downy mildew pathogen, *Bremia lactucae*, constructed from molecular markers and avirulence genes. Fungal Genetics and Biology, 39: 16-30.

Ganga, G, Sandeep Varma, R and Johnson K George. 2004. ISSR and RAPD markers in diversity analysis of *Piper* species. In: Proc. Sixteenth Kerala Science Congress, CWRDM, Kozhikode. (Ed) M.S. Valiyathan, pp:639-642.

Hamza, S, Srinivasan, V, and Sadanandan, A.K. 2004. Effect of integrated nutrient management on soil nutrient availability. In: Proc. Sixteenth Kerala Science Congress, CWRDM, Kozhikode. (Ed) M S Valiyathan, pp: 313-338.

John Zachariah, T., Maya, K.M, Heartwin Amala Das, P. and Rajesh, P.N 2004. Zero energy chamber – An effective post harvest storage system for fresh ginger, Proc. of the National Seminar on New perspectives in spices Medicinal and Aromatic plants, 27-29 November 2003. (Eds). Korikanthimath, V. S, et. al, pp: 208-211.

Karun, A, Siril, E.A, Radha, E and Parthasarathy, V.A ,2004. Somatic embryogenesis and plantlet regeneration from leaf and inflorescence explants of arecanut. Curr. Sci., 86:1623-1628.

Nirmal Babu, K., Sajina, A., Minoo, D., John, C. Z., Mini, P. M., Rema, J and Ravindran, P.N 2003. Micropropagation of camphor tree *Cinnamomum* camphara (Presl.). Plant Cell, Tiss. and Org., Cult., 74 : 179-183.

Parthasarathy, V. A, Krishnämoorthy, B., Sasikumar B and Saji, K.V. 2004. Exploitation

of heterosis in black pepper and cardamom In: Souvenir - National Symposium on harnessing heterosis in crop plants, 13-15 March 2004 Varanasi, India, pp: 140-142.

Parthasarathy, V.A., Geetha Lakshmi, P and Niral , V. 2004. Analysis of coconut cultivars and hybrids using isozyme polymorphism. Acta Bot. Croat., 63, 69-74.

# Popular articles

Hamza, S. 2004. Bush pepper for both medicinal and ornamental purpose. Aramam(Mal.), 21 (1): 14 -16.

Hamza, S. 2004. Manures from kitchen waste, Aramam, 21 (2): 15.

Johny, A.K. and Ravindran, P.N. 2004. Chilli varieties for higher yield. Spice India, 17(4): 2004.

Krishnamoorthy, B. 2004. Hints on 'Tippali' cultivation. Spice India (Tamil), 17(4): 12-13.

Krishnamoorthy, B. 2003. Cinnamon. Spice India (Hindi), 15 (10): 2-4.

Krishnamoorthy, B. 2003. IISR Vishwasree - A high yielded nutmeg variety. Spice India (Hindi), 5(10): 7-9

Krishnamoorthy, B and Rema, J 2003. Clove - a good intercrop. Spice India (Hindi), 15 (10): 13-15.

Krishnamoorthy, B. 2003. Ginger. Spice India (Hindi), 15 (12): 13-16.

Krishnamoorthy, B. Rema, J and Mathew, P.A

2004. For the best in cinnamon. Spice India, 17 (5): 19-21.

Rema J, Krishnamoorthy, B and Mathew, P.A 2004. Making clove, allspice and nutmeg productive. Spice India, 17 (6): 22-25.

Sasikumar, B. 2004. The legendary spice fame of Kerala. Kerala Karshakan (Mal.), 50(1): 18-21.

Sasikumar, B. 2004. Vanilla musings. Spice India, 17 (5): 29-30.

Sasikumar, B. 2004. Ginger and turmeric improved varieties and preservation of seed rhizomes. Spice India, 17 (2): 12-13.

Sasikumar, B. 2004, Vanilla boom - will it sustain? Karshakan (Mal.), 12(6): 56-58.

# Technical Publication

Manual on Biotechnology and Biochemistry - Summer training on Techniques in Biochemistry and Biotechnology, 5 May to 4 June 2004 (Eds). Krishnamoorthy, B. and Kumar, A. Indian Institute of Spices Research, Kozhikode. p: 190.

# Book

Ravindran, P.N., Nirmal Babu, K. and Shailaja, R. (Eds.) Cinnamon and Cassia – The Genus Cinnamomum. CRC Press, Boca Raton, USA, p.361.

## Chapters in Books

Krishnamoorthy, B. and Rema, J. 2004. Allspice. In: Handbook of herbs and spices. Vol. 2 (Ed.) Peter, K .V. CRC Press, Woodhead

## SPICES NEWS

Publishing Limited, Cambridge, England.<sup>,</sup> pp. 117-139:

Krishnamoorthy, B and Rema, J., 2004. End uses of Cinnamon and Cassia. In: The Genus Cinnamomum. (Eds.) Ravindran, P.N, Nirmal Babu, K and Shylaja, R. CRC Press, Boca Raton, USA. pp. 311- 326.

Nirmal Babu, K, Ravindran, P.N and Shylaja, R. 2004. Camphor tree Cinnamomum camphora (Bercht.& Presl). In: Cinnamon and Cassia - The Genus Cinnamomum. (Eds.) Ravindran PN, Nirmal Babu, K and Shailaja, R. CRC Press, Boca Raton, USA. pp. 211-238.

Parthasarathy, V. A. 2004. Biotechnology of coconut - Status and Scope. In: Conservation biotechnology of plant germplasm, IPGRI, Rome. pp. 165-172.

Peter, K.V and Nirmal Babu, K. 2004 Introduction. In: Handbook of herbs and spices. Vol.,2, (Ed.) Peter, K.V. CRC Press, Woodhead Publishing Limited, Cambridge. pp. 1-8.

Ravindran, P.N. and Nirmal Babu, K. 2004. Introduction. In: Cinnamon and Cassia - The Genus Cinnamomum. (Eds.) Ravindran, P.N., Nirmal Babu, K. and Shylaja, R. CRC, Press, Boca Raton, USA. pp. 1-13.

Ravindran, P.N, Shylaja, R. Nirmal Babu, K. and Krishnamoorthy, B, 2004 Botany and crop improvement of Cinnamon. In: Cinnamon and Cassia – The Genus Cinnamomum. (Eds) Ravindran, P.N, Nirmal Babu, K and Shylaja, R. CRC Press, Boca Raton, USA. pp.14 -79. Ravindran, P.N, Geetha, S.P and Nirmal Babu, K 2004. Under explaited medicinal plants and spices. In: Handbook of herbs and spices. Vol.2, (Ed.), Peter, K.V., CRC Press, Woodhead Publishing Limited, Cambridge. pp. 53-103.

Sasikumar, B. 2004. Rosemary. In: Hand Book of herbs and spices. Vol 2, (Ed.) Peter, K. V., Woodhead Publishing Ltd. Cambridge. pp:-242-252.

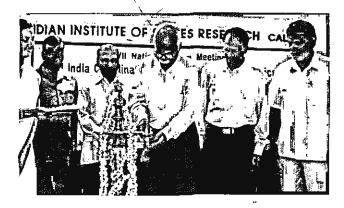
Shylaja, R., Ravindran, P.N and Nirmal Babu, K. 2004. Other useful species of *Cinnamomum*, In: Cinnamon and Cossia - The Genus Cinnamomum. (Eds.), Ravindran, P.N, Nirmal Babu, K and Shylaja, R. CRC Press, Boca Raton, USA. pp. 330-335.

# XVII AICRP WORKSHOP ON SPICES

A three day Workshop (Group Meeting) of the All India Coordinated Research Project an Spices (AICRPS) was held during 3-5 February 2004 at Indian Institute of Spices Research (IISR), Kozhikode. The workshop was jointly organized by Indian Council of Agricultural Research (ICAR), New Delhi and Indian Institute of Spices Research, Kozhikode. About 100 delegates including scientists working in 28 AICRPS research centres; experts from Spices Board; IISR; KAU; DASD; NBPGR; farmers; representatives from agro input agencies; Principal Investigators of ICAR Adhoc Schemes and officials from Agricultural Departments participated in the deliberations.

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The workshop was inaugurated by Prof. (Dr.) K.V. Peter, Vice Chancellor, Kerala Agricultural University, Thrissur at the Silver Jubilee Hall, IISR, Kozhikode. The inaugural function was presided over by Dr. S.N. Pandey, Asst. Director General (PC), ICAR. Dr. V.A. Parthasarathy, Director, IISR, Kozhikode welcomed the delegates.



Prof. (Dr.) K.V. Peter, Vice Chancellor, KAU inaugurating the XVII AICRPS Workshop. Dr. K.V. Ramana, Dr. S.N. Pandey, Dr. V.A. Parthasarathy and Dr. M.N. Venugopal are also seen (L-R)

The plenary session was chaired by Dr. G. Kalloo, DDG (Hort. Crop Sci.), ICAR, New Delhi on 5 February 2004. The workshop identified 17 new spices varieties of black pepper, turmeric, cardamom, cumin, fennel, fenugreek, ajowain, nigella and dill for central/state release.

# AWARDS/HONOURS

Dr. T.K. Jacob, Chief Training Organizer, KVK, Peruvannamuzhi was conferred with a State Level Commendation Certificate by NABARD for the outstanding services of KVK in the field of VVV Club activities. Santhosh J. Eapen, Scientist (SG), Nematology was awarded Ph.D by the Calicut University for his thesis entitled 'Biological control of plant parasitic nematodes of spices.'

**Dr. V.A. Parthasarathy**, Director, IISR, Kozhikode chaired the sessions on **Variety Release in AICRP** (Tuber Crops) Group meeting held at CTCRI Thiruvananthapuram and Crop improvement session in Staff Research Council of NRC (Cashew) Puttur.

Mr. P.A. Mathew, Principal Scientist (Hort.) chaired the session on Crop improvement and Development in the Seminar on Vanilla – Aspects and Prospects held at Sirsi.

Dr. K. Nirmal Babu, Sr. Scientist (Plant breeding) co-chaired the session on Biotechnology in the sixteenth Kerala Science Congress, held at CWRDM, Kozhikode.

## TRANSFER OF TECHNOLOGY

A video film on **'VALUE ADDITION IN SPICES'** was made by the Directorate of Extension and Research, Govt. of India in collaboration with IISR, Kozhikode.

#### Extension pamphlet

Vermicompost production (Malayalam).

## **Radio talks**

#### John Zachariah, T

Diversified use of spices including question and answers on diversified use of spices. AIR, Kozhikode, 4 February 2004 and 23 March 2004.

# Krishnamoorthy,B

Varities of tree spices. AIR, Kozhikode. 29 March 2004.

# Prakash, K

Harvesting and processing of ginger and turmeric. AIR, Kozhikode, 4 January 2004.

Organic spice cultivation and marketing. AIR, Kozhikode, 23 May 2004.

Tree spices management and protection. AIR, Kazhikode, 26 June 2004.

# Sasikumar, B

Genetic Resources of Spices. Farm Radio

School Programme - 'Spices for Prosperity'. AIR, Kozhikode, Thrissur ond Thiruvananthapurom 13 Feb 2004.

Agar wood – A tree spice. F.M. Radio and AIR, Kozhikode, ('Sudinam') 25 February 2004.

## Success stories of spices varieties

Success stories of IISR ginger ('Varada' and 'Mahima'), turmeric varieties ('Prabha' & 'Prathibha') appearing in print and electronic media are steadily bringing name and fame to the Indian Institute of Spices Research among the farming community. The most recent success stories that appeared in the mass media are:

Media	Торіс
The Hindu, Agricultural colum (Farmer's Note Book), 27-11-03	Prabha and Prathibha (turmeric) & Varada and Mahima (ginger) success story of a farmer from Trissur, Kerala
t The Hindu, News story, 11-12-03	Varada's popularity among farmers
Malayala Manorama (Mal), 2-1-2004 	Prabha and Prathibha (turmeric) & Varada and Mahima (ginger) success story of a farmer from central Kerala
Kerala Karshakan (Mal) Jan. 2000	Prabha's success story
Spices India (Mal) Feb. 2004	Prabha and Prathibha (turmeric) & Varada and Mohima (ginger) success story of a former .
India Vision channel	Former's experience with ginger and turmeric varieties of IISR, Kozhikode
AIR , Trissur	Farmer's experience with ginger and turmeric varieties of IISR, Kozhikode (interview)

JANUARY-JUNE 2004

#### SPICES NEWS

## VANILLA SEMINAR

Indian Society for Spices, Kozhikode in association with IISR, Kozhikode; ICAR Research Complex, Goa; Department of Horticulture, Govt. of Karnataka; Spices Board, Kochi; Directorate of Arecanut and spices Development, Kozhikode and University of Agricultural Sciences, Dharwad organised, a seminar on Vanilla in India – Aspects and Prospects' during 29-30 April 2004 at the TSS Hall of APMC Yard, Sirsi, Karnataka.

# KVK ROUNDUP

KVK conducted a total of 38 training programmes on topics like vermicompost production, plant propagation techniques, vegetable production, nursery techniques of horticultural crops, agroforestry, cultivation of medicinal plants, azolla cultivation, mushroom production, apiculture, paper bag making, plant poisoning in dairy animals, diary animal management, oyster mushroom culture, vermiculture, backyard poultry rearing and goat rearing, during January to May 2004. About 702 participants took part in the various training programmes.

KVK also affered 108 consultancy/advisory service, 76 numbers of artificial insemination services, 145 FMD immunization programme and 6 animal health campaigns/fertility camps during the periad.

A total of 241 farmers visited KVK and consulted on vanilla planting vermiculture,

availability of planting materials and other inputs and plant protection aspects etc.

# Study tour

KVK conducted three study tours to Uravu, Wynadu on 14/1/04, to KAU, Trissur on 10/2/ 04 and Kottakal Arya Vaidya Sala, Herbal Garden Kottakal on 25/2/04.

## FLD Programme

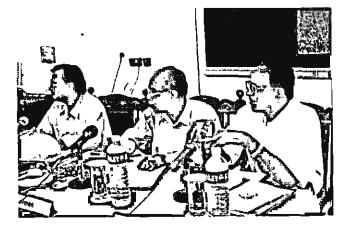
Field level demonstrations (FLD) on production of organic vegetable cowpea, mosaic resistant okra, and rearing of Kuttanad layer ducks under backyard system are in progress under the aegis of KVK, Peruvannamuzhi.

## On farm testing

On farm evaluation of technologies like management of fruit fly in bitter gourd, utilization of pepper grafts in swampy areas and in animal science effectiveness of PGF2 alpha in anoestrus in diary cattle are in progress through KVK.

# RAC 2004

The Research Advisory Committee (RAC) meeting of the Institute was held during 6-7 April 2004. Dr. K.V.A. Bavappa, chairman and members Dr. C. K. George, Dr. V. Arunachalam, Dr. R.K. Sharma, Dr. V. A. Parthasarathy (Director, IISR, Kozhikode) and Dr. K.V. Ramana (PC Spices) Member secretary, attended the meeting, besides all scientists of the institute. The Member Secretary presented the Action Taken Report on the recommendation af RAC 2003. The Project Leaders of 11 mega projects presented the progress of works during the year '2003-04.



RAC in progress. Dr. K.V. Ramana, Member Secretary (left), Dr. K.V.A. Bavappa, Chairman (centre) and Dr. V. A. Parthasarathy, Director, IISR, Kozhikode (right) are seen.

The RAC members appreciated the scientific contribution made by the scientists and suggested that scientists should encourage the farmers to visit the institute so as to learn their problems. The chairman stressed the need to focus on the production of safe, clean and ecofriendly produce. The RAC meeting was concluded with the remarks of the chairman that 21<sup>st</sup> century is a golden era with hundreds of challenges and opportunities in spices research and the scientific community should be able to channelise it for the benefit of the farmers.

# Dr. V.L.Chopra appointed Member, Planning Commission

Dr. V.L. Chopra, former Director General, Indian Council of Agricultural Research is included in the newly constituted planning commission: whose effective head is the noted economist Sri. Montek Singh Ahluwalia. Dr. Chopra was the chairman of the Research Advisory Committee of the Indian Institute of Spices Research, Kozhikode during 1998-2001.

The entire staff members of the Institute join in congratulating Dr. Chopra, on his coveted posting.

# SRC

XVIII Staff Research Council was held on 8<sup>th</sup> April 2004 under the chairmanship of Dr. V.A Parthasarathy, Director, IISR, Kozhikode. A new mega project on 'Developing customized soft ware and data base on spices' was approved during the meeting. At present 39 Institute funded projects and 16 externally funded projects are in operation under 12 mega projects in the Institute. The SRC reviewed the progress of work in these projects.

# INSTITUTE MANAGEMENT COMMITTEE

The fourth meeting of the 4<sup>th</sup> Management Committee of the Institute was held on 26.5.2004 at the Institute under the chairmanship of Dr. V.A. Parthasarothy, Director. Dr. E.V Nybe, outside member; Mr. K. Mukundan, non official member; Dr. M. Anandaraj , Dr. B. Chempakam, Dr. B. Sasikumar (all members) besides Mr. A.P Sankaran, Member Secretary and special invitees Mr. M. K. Sachidanandan , Assistant Finance and Accounts Officer, and Dr. K. N. Kurup, Head, Social Science, IISR, Kozhikode attended the meeting.

IMC approved the constructions of library cum-administrative block of Chelavoor campus, four Type IV quarters and one Type V quarters at Chelavoor, purchase of HPLC accessories in lieu of IR spectrometer and sonicator and proposal for  $\frac{1}{4}$  50 KV generator for the Cardamom Research Centre, Appangala.

# ່ງກະດ

The last meeting of the fifth Institute Joint Staff Council was held under the chairmanship of Dr. V.A. Parthasarathy, Director, IISR on 21" May 2004 at IISR, CRC,-Appangala.

Dr. T. John Zachariah, Secretary, official side welcomed the members. Chairman in his introductory remarks, expressed the satisfaction of fulfilling all the major suggestions of IJSC. Secretary, official side presented the action taken report. Agenda items were discussed and identified for necessary action. The meeting came to an end with the vote of thanks by Mr. N.A. Madhavan, Secretary (staff side).

# **NEW PROJECTS SANCTIONED**

Determination of purity of powdered market samples of major spices using PCR techniques, protein profiling and HPLC method (DBT).

Development of chilli (Capsicum onnum) hybrid for paprika oleoresin production (Network Project - ICAR). Development of technology package for organic farming in black pepper, ginger and turmeric. (Network project on Organic Farming – ICAR).

Evoluation of Sulphote of Potash (SoP) os pottasium on growth, yield and quality of black pepper (Indian Potash Ltd.).

## **HINDI CELL**

Hindi cell arranged Hindi Training on Prabodh and Pragya at the Institute and 14 staff attended this training. Mr. B. Krishnamoorthy, Ms. N. Prassannakumari and Mr. V.C. Sunil attended Town Official Language Implemen tation Committee meeting at Hotel Asma Tower, Kozhikode on 3.6.2004. Two quarterly meetings on Official Language Implementation were conducted on 12.1.2004 and 17.2.2004. Two quarterly progress reports regarding the Official Language Implementation at IISR, Kozhikode and one annual report for 2003-04 were sent to ICAR, New Delhi.

## **RECREATION CLUB**

Dr. V.A. Parthasarathy, Director inaugurated the activities of the IISR Staff Recreation Club for the year 2004-'05 on 21 June 2004. The Club was rechristened **SARANI** (Sports, Arts and Recreational Activity Novelties of the Institute) based on an opinion poll conducted among the members.

#### SPICES NEWS

JANUARY-JUNE 2004

# PERSONNEL

## Promotions

Name	Promoted to	w.e.f
Dr. C.K.Thankamani, Scientist (Sr. Scale)	Senior Scientist	11-06-2000
Dr. P. Rajeev, Scientist (Sr. Scole)	Senior Scientist	03-06-2002
Dr. K.P.M. Dhamayanthi*, Scientist (Sr. Scale)	Senior Scientist	10-06-2002
Dr. Anke Gowda, Scientist (Sr. Scole)	Senior Scientist	21-07-2002
Dr. K.N. Shiva, Scientist	Scientist(Sr. Scale)	28-07-2002
Dr. K.S. Krishnamurthy, Scientist (Sr. Scale)	Senior Scientist	14-09-2002
Dr. K. Kandiannan, Scientist (Sr. Scale)	Senior Scientist	29-12-2002
A. Sudhakaran, Artist-cum-Photographer (T3)	Artist-cum- Photographer (T4)	6-3-2004
K. Jayarajan, Stat. Assistant (T4)	Tech. Officer (T5)	7-9-2004

\*Transferred to CICR Regional Station, Coimbatore on 29-11-2002

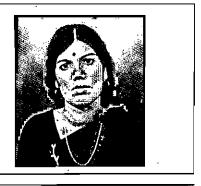
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#### Transfers

Mr. E.K. Mohandas, Supporting Staff, Grade II, KVK, Peruvannamuzhi to IISR Kozhikode Mr. T.C. Prasad, Driver-cum-Mechanic (T2), KVK IISR, Kozhikode to IISR Peruvannamuzhi.

## OBITUARY

Ms. Enid Savitha, Asst. Administrative Officer, Cardamom Research Centre, Indian Institute of Spices Research, Appangala, Coorg, passed away on 17-4-2004. She is survived by her husband and children.



Editor: Dr. B. Sasikumar, Members: Dr. Johny Kallupurackal and P.A. Sheriff, IISR, Kozhikode. Photo credit : A. Sudhakaran

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